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THE SEED CORN MAGGOT

The seed-corn maggot (Hylemyia cilicrura) is the immature form of a fly. This fly has the general appearance of the house fly, but is somewhat smaller and not as robust in body form as the house fly.

The maggot attacks a variety of sprouting seed. It is particularly destructive to beans, peas melons and corn, especially during cool, wet seasons, which are not favorable to the rapid germination of seeds. The flies appear very early in the season and are capable of considerable activity at low temperatures. The females deposit their eggs upon the surface of the soil and the maggot which hatches from these eggs enters the soil and feeds upon decaying vegetable matter if sprouting seed is not available. The flies are particularly attracted to lands which contain large amounts of humus. Organic fertilizers, such as fish scrap, dried blood and bone meal, are particularly attractive to the adult flies. There may be several generations each season. The fly, however, is not especially active during the warm months of the year.

Due to the manner in which the maggot attacks the crop, no direct remedy can be used to an advantage. A great deal of injury from this pest, however, can be prevented by certain cultural practises. Since the flies are attracted to organic fertilizers for egg deposition, these materials should not be used directly in the row or about the hill of the crop. If it is necessary to use organic fertilizers these should be applied sometime before the planting of the crop or the application made after the plants have appeared above ground. Partially decayed vegetable matter is also very attractive to the flies and consequently land containing a cover crop should be plowed and tilled at a period which will allow complete decay of the cover crop before the planting of beans or other seeds which are susceptible to maggot injury.

A thorough preparation of the seed bed in order to promote rapid germination of the seed would also be of value in preventing damage by this pest. The seed should also be planted as shallow as practical.

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In some localities the seed corn maggot attacks potato seed pieces almost completely destroying them before the plant is able to properly establish itself. This type of injury can be avoided by corking the seed pieces previous to planting by storing the disinfected seed pieces for 10 days to two weeks at a temperature of 55° to 65° F. and at a humidity of 80% to 90%. The storage containers should be disinfected with 5% copper sulphate or 2% formalin solution to prevent decay of the freshly cut surfaces. The proper conditions can be easily maintained in the storage cellar.

TRUCK CROP AND GARDEN
INSECT INVESTIGATIONS

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